

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of

Henry Thomas Ubik

Serial No.: 10/064,964

Group Art Unit: 3714

Filed: September 4, 2002

Examiner: Leneau, Ronald

For: AUTOMATED COLLECTION OF VEHICLE DATA

Certification under 37 CFR 1.10

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10/17/2007

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(Signature)



Karen Hopf

BRIEF ON APPEAL

Mail Stop Appeal Brief-Patents
Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450

The following appeal brief is being submitted pursuant to the Notice of Appeal dated October 17, 2007, for the above-identified application.

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I. Real Party in Interest

The real party in interest in this matter is FORD GLOBAL TECHNOLOGIES, INC., in Dearborn, Michigan, (hereinafter "FORD") and is the assignee of the present invention and application.

II. Related Appeals and Interferences

There are no other known appeals or interferences, which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

III. Status Of The Claims

Claims 1 through 7 are currently pending and stand under final rejection, from which this appeal is taken.

IV. Status Of Amendments

There have been no amendments subsequent to the final rejection dated 6/7/07.

V. Summary Of Claimed Subject Matter

The invention is a method for collecting data from a vehicle in real time for inventory of transportation vehicles without manual intervention. In general the present invention relates to inventory management and traces transportation vehicles from assembly plants to its receipt at dealers, fleet sites and rental sites. A vehicle is fixed with an RF transmitter and as long as that vehicle is within a predefined service area, the transmitter is in contact with a server. Any data desired from the vehicle is easily accessed using the server and transmitter without the need for manual intervention. The present invention eliminates the possibility for error when relying on human input for recording mileage, fuel levels, vehicle identification numbers, etc. thereby greatly enhancing the efficiency of inventory and service management.

The claimed subject matter can be identified as follows with reference numbers, identified in parentheses, from Figures 1 and 2 and direct paragraph numbers, identified in brackets, from the specification as filed:

1. A method (100) for inventory management of a plurality of transportation vehicles (14) wherein each vehicle has an active RF transmitter (12) in communication with a diagnostic service bus (16) on said vehicle (14), said method (100) comprising the steps of: [0015]

defining a service area (18) for active transmission between said RF transmitter (12) and a server (22) specific to said service area; [0014], [0017], [0018]

communicating data relevant to said transportation vehicle (14) from said transmitter (12) to said server (20) automatically and in real time; and [0017], [0019]

determining an inventory of transportation vehicles within said predefined service area (18). [0018]

2. The method (100) as claimed in claim 1 further comprising the step of communicating a time said vehicle entered said predefined service area to said server. [0024], [0026]

3. The method(100) as claimed in claim 1 further comprising the step of communicating a time said vehicle left said predefined service area to said server. [0024]

4. The method as claimed in claim 1 further comprising the steps of:
communicating a time said vehicle entered said predefined service area to said server; and
communicating a time said vehicle left said predefined service area to said server. [0024]

5. The method as claimed in claim 1 further comprising the steps of:
determining a location of a predetermined number of vehicles having predetermined characteristics, including a destination site; and [0026]

delivering said predetermined number of vehicles to said destination site. [0029]

6. A method (200) for service management of a plurality of transportation vehicles (14) wherein each vehicle (14) has an active RF transmitter (12) in communication with a diagnostic service bus (16) on said vehicle, said method comprising the steps of: [0023]

defining a service area (18) for active transmission between said RF transmitter (12) and a server (20) specific to said service area (18); (202) at [0024]

communicating (203) data relevant to said transportation vehicle from said transmitter to said server automatically and in real time; and [0025], [0026]

determining if a service procedure is necessary on said vehicle based on said communicated data. [0034]

7. The method as claimed in claim 6 further comprising the steps of:

communicating a time said vehicle (14) entered said predefined service area (18) to said server (20); and [0024]

communicating a time said vehicle (14) left said predefined service area (18) to said server (20). [0024]

8-10. Previously withdrawn.

VI. Grounds of Rejection to be Reviewed on Appeal

The following issue is presented in this appeal, which corresponds directly to the Examiner's final ground for rejection in the final Office Action dated June 7, 2007 and the Advisory Action dated July 31, 2007:

Whether claims 1-7 are patentable under 35 U.S.C. §103 over U.S. patent publication No. 2003/0163233 A1 to Song et al. (hereinafter, Song) in view of U.S. patent publication No. 2002/0044058 A1 to Heinrich et al. (hereinafter, Heinrich).

VII. Argument

35 U.S.C. §103.

The present invention is directed to the problem of data collection techniques that require manual collection, or a direct electronic connection, to a vehicle in order to collect data from a vehicle. The present invention allows inventory management through collection of data and tracking vehicles from assembly to receipt at dealers, fleet sites and rental sites. Independent claims 1 and 6 of the present invention require defining a service area for active transmission between an RF transmitter and a server specific to said service area. The present invention is specifically concerned with the location of the vehicle being tracked, hence the predefined service area limitation, and is not concerned with the vehicle data while the vehicle is in use.

The Song reference is directed to a maintenance management system that notifies a user, who is operating the vehicle, while the vehicle is in operation, that it is time for maintenance or repair. Because the Song reference is directed to the need for notifying a user who is operating the vehicle, while the vehicle is in operation, it is respectfully asserted that it would not have been obvious to one of ordinary skill in the art to add the limitation of a defined service area for determining an inventory of transportation vehicles. When a vehicle is running, or in operation, it is counter-intuitive to the purpose of the notification process taught in Song to add the limitation of a predefined service area. The teachings of Song are concerned with the location of the vehicle only in emergency situations and are not concerned at all with the vehicle's destination.

The Song reference is directed solely to maintenance needs that are to be communicated to a vehicle's operator while the vehicle is running. It is respectfully asserted that one skilled in the art would not look to combine the Song reference with a reference that teaches inventory management because when the vehicle in Song is not being used, or is parked, there is no

operator to communicate the information to and no need to communicate that information. There is no need for data collection and/or communication in the vehicle in Song when the vehicle is not in use. The teachings of Song have no use for tracking a vehicle's destination, location, time of entry and time of departure for inventory management as taught in the present invention. Therefore it is respectfully asserted that one skilled in the art would not look to combine Song with an inventory management reference as suggested by the Examiner.

In direct contrast, the present invention is directed to vehicles that are not running, or in operation, but are being tracked as they work their way through an assembly process to a delivery destination. The Examiner indicated that Song does not explicitly disclose an inventory of transportation vehicles within a predefined service area, yet it would have been obvious to utilize an inventory system, as taught in Heinrich, into the system of Song because it would provide a savings in both time and labor to audit inventory automatically without the need for physically checking every vehicle. Appellant's respectfully disagree for the reasons given above.

The Examiner indicated that the tracking system of Song is capable of determining a location of a predetermined number of vehicles and communicating the time of a vehicle's entry and exit of the predefined service area. Appellants respectfully disagree. The tracking system of Song is a GPS system that is initiated by the operator in the event of an emergency situation. When the driver activates an emergency switch, power is supplied to a location detector, and vehicle location is transmitted via a communication link 15 such as a wireless communication network by way of a cellular transceiver, PSC, RTS or pager, wireless Internet, or private telecommunication network server. There is no way of tracking a time of entry and/or exit of a predefined service area. Notwithstanding there is no predefined service area disclosed in Song, unless the GPS system is activated and a communication link is established there is no

communicating the location to the server. Further, the server only receives an indication of when the emergency switch is powered, which is not indicative of a time/date stamp as claimed in the present invention.

According to the present invention, location, time of entry and time of exit are all determined by the vehicle's presence, or lack of presence, within the defined service area. With the present invention, there is no need for activation of an emergency switch to provide power to a GPS system, or the availability of a communications link through which to transmit the GPS data. According to the teachings of the present invention, the RF transmitter is in communication with a server in the predefined service area when the vehicle is in the predefined service area and can readily track when the vehicle enters and/or exits the predefined service area.

Further it is respectfully asserted that even if the references were combined as suggested by the Examiner, their combination would not result in the Appellants' invention. The teachings of Heinrich are directed to scanning radio frequency identification data. Should this system be applied to the maintenance identification system of Song, it would still not result in the present invention. Heinrich discloses an automatic data collection system that uses hands-free RF identification that is wrist-mounted. It is respectfully asserted that this is not practical in conjunction with the system taught in Song as Song is related to a vehicle in operation, which may be operated in an unlimited area. Further, even if combined, neither reference is directed to defining a service area and determining an inventory of transportation vehicles as claimed in the present invention.

It is also respectfully asserted that if Song and Heinrich were combined as suggested by the Examiner, the GPS system of Song would have to be activated and linked to the RF transmitter of Heinrich, which would have to be within range of the transmitter in Song. Because

Song is specifically directed to a vehicle in use, there is no way of knowing where to position the RF transmitter of Heinrich in order to obtain the desired information from the transmitter system of Song.

It is respectfully requested the rejection of claims 1-7 under 35 U.S.C. §103(a) be withdrawn.

It is respectfully asserted that the claims as currently pending are in condition for allowance and that a Formal Notice of Allowance be issued therefor.

VIII. Claims Appendix

A copy of the claims involved in this appeal, namely claims 1-7, is attached hereto as a Claims Appendix.

IX. Evidence Appendix

None

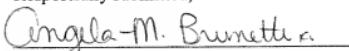
X. Related Proceedings Appendix

None

XI. Conclusion

For the reasons advanced above, Appellants respectfully contend that each claim is patentable. Therefore reversal of the rejection of claims 1 through 7, and Notice of Allowance thereof are requested.

Respectfully submitted,



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CLAIMS APPENDIX

1. (Rejected) A method for inventory management of a plurality of transportation vehicles wherein each vehicle has an active RF transmitter in communication with a diagnostic service bus on said vehicle, said method comprising the steps of:

defining a service area for active transmission between said RF transmitter and a server specific to said service area;

communicating data relevant to said transportation vehicle from said transmitter to said server automatically and in real time; and

determining an inventory of transportation vehicles within said predefined service area.

2. (Rejected) The method as claimed in claim 1 further comprising the step of communicating a time said vehicle entered said predefined service area to said server.

3. (Rejected) The method as claimed in claim 1 further comprising the step of communicating a time said vehicle left said predefined service area to said server.

4. (Rejected) The method as claimed in claim 1 further comprising the steps of: communicating a time said vehicle entered said predefined service area to said server; and

communicating a time said vehicle left said predefined service area to said server.

5. (Rejected) The method as claimed in claim 1 further comprising the steps of: determining a location of a predetermined number of vehicles having predetermined characteristics, including a destination site; and delivering said predetermined number of vehicles to said destination site.

6. (Rejected) A method for service management of a plurality of transportation vehicles wherein each vehicle has an active RF transmitter in communication with a diagnostic service bus on said vehicle, said method comprising the steps of:

defining a service area for active transmission between said RF transmitter and a server specific to said service area;

communicating data relevant to said transportation vehicle from said transmitter to said server automatically and in real time; and

determining if a service procedure is necessary on said vehicle based on said communicated data.

7. (Rejected) The method as claimed in claim 6 further comprising the steps of:

communicating a time said vehicle entered said predefined service area to said server; and

communicating a time said vehicle left said predefined service area to said server.

8-10. (Previously Canceled)

EVIDENCE APPENDIX

No submitted or related evidence.

RELATED PROCEEDINGS APPENDIX

No related proceedings